



J1017 U.S. PTO

09/829126



04/09/01

**Patent Office
Canberra**

I, JONNE YABSLEY, ACTING TEAM LEADER EXAMINATION SUPPORT
& SALES hereby certify that annexed is a true copy of the Provisional
specification in connection with Application No. PQ 6758 for a patent by
ARISTOCRAT LEISURE INDUSTRIES PTY LTD filed on 07 April 2000.

WITNESS my hand this
Sixth day of February 2001

3

JONNE YABSLEY
ACTING TEAM LEADER
EXAMINATION SUPPORT & SALES

AUSTRALIA

Patents Act 1990

Aristocrat Leisure Industries Pty Ltd

PROVISIONAL SPECIFICATION

Invention Title:

Gaming machine with prize meter

The invention is described in the following statement:

Gaming machine with prize meter

Field of the Invention

This invention relates to a gaming machine. More particularly, the invention relates to a gaming machine and to an improved feature of such a
5 gaming machine.

Background to the Invention

Players who regularly play gaming machines quickly tire of particular games and therefore it is necessary for manufacturers of these machines to
10 develop innovative game features which add interest to the games. In so doing, it is hoped to keep players amused and therefore willing to continue playing the game as well as to attract new players.

Also, with the growth that has occurred in the gaming machine market, there is intense competition between manufacturers to supply various
15 existing and new venues. When selecting a supplier of gaming machines, the operator of a venue will often pay close attention to the popularity of various games with their patrons. Therefore, gaming machine manufacturers are keen to devise games which are popular with the players as a mechanism for improving sales, retaining customers and attracting new customers.

20

Summary of the Invention

According to the invention, there is provided a gaming machine having a display means and a game control means arranged to control images displayed on the display means, the game control means being arranged to
25 play a game wherein one or more random events are caused to be displayed on the display means and, if a predefined winning event results, the machine awards a prize, the gaming machine being characterized in that the display means includes a representation of the awarding of the prize and the gaming machine including a player-operable control device which, upon
30 manipulation by a player, controls an outcome of the representation to determine an amount awarded to the player.

The representation may be a representation of a win meter. The representation may be in the standard form of serially incrementing digits. Instead, the representation may be a graphical display of a device
35 representing an increasing award. In one embodiment of the invention, the

representation may be in the form of a mercury-type thermometer where a representation of an increasing mercury column represents an increasing prize.

5 In this specification, the term "amount" is to be understood, unless the context clearly indicates otherwise, as including a zero amount.

The control device may be an actuator operable by the player to stop the prize meter increasing. The amount represented on the prize meter at which the player stops the prize meter is then awarded to the player.

10 The control means may include a threshold level such that, when the prize meter reaches that threshold level without having being stopped by the player, the prize meter reverts to zero and no prize is awarded to the player.

It is intended that this feature of the gaming machine will be as a feature game which is triggered upon the occurrence of a trigger condition arising in a base game.

15 Moreover, the feature could be played as a tournament across a bank of linked gaming machines but may also be applicable to a stand-alone gaming machine.

In operation, the gaming machine may select a random number in the range from one to a highest possible meter value such as, for example, one
20 hundred. The meter will commence incrementing and the player will be able to stop the meter at any time by means of the actuator. If the meter reaches the level of the random number that was selected, the feature will end and no prize will be paid. However, if the player presses the actuator before the meter reaches the chosen random number then the player will be awarded
25 the amount that is on the meter at the time that the actuator is pressed.

Should the player stop the meter before the random number is reached, the control means may cause the selected random number to be displayed so that the player can ascertain at what level the machine would have awarded no prize.

30

Brief Description of the Drawings

The invention is now described, by way of example, with reference to the accompanying drawings in which:-

35 Figure 1 shows a three dimensional view of a gaming machine, in accordance with the invention;

Figure 2 shows a block diagram of a control circuit of the gaming machine;

Figures 3a to 3d show display screens of a first example of a first embodiment of a feature game played on the gaming machine of Figure 1;

5 Figures 4a and 4b show a second example of the feature game of Figures 3a to 3d;

Figures 5a to 5d show schematic display screens of a second embodiment of a feature game played on the gaming machine of Figure 1;

Figure 6 shows a flow chart of the games of Figures 3 and 4;

10 Figure 7 shows a flow chart of the game of Figure 5; and

Figure 8 shows a flow chart of a further embodiment of the game.

Detailed Description of the Drawings

In Figure 1, reference numeral 10 generally designates a gaming machine, including a game, in accordance with the invention. The machine
15 10 includes a console 12 having a video display unit 14 on which a game 16 is displayed, in use. The game 16 is a spinning reel game which simulates the rotation of a number of spinning reels 18. However, the invention could be applicable to other types of gaming machines, such as machines which
20 relate to card-game type games, ball games such as Keno, Pachinko, or the like. An actuator, illustrated schematically at 20, facilitates playing of the game 16.

The machine 10 includes a top box 22 on which artwork 24 is carried. The artwork 24 includes paytables, details of bonus awards, etc.

25 A coin tray 26 is mounted beneath the console 12 for cash payouts from the machine 10.

Referring now to Figure 2 of the drawings, a control means or control circuit 30 is illustrated. A program which implements the game and user interface is run on a processor 32 of the control circuit 30. The processor 32
30 forms part of a controller 34 which drives the screen of the video display unit 14 and which receives input signals from sensors 36. The sensors 36 include sensors associated with the actuator 20 and touch sensors mounted in the screen 16. The controller 34 also receives input pulses from a mechanism 38 indicating that a player has provided sufficient credit to commence playing.
35 The mechanism 38 may be a coin input chute, a bill collector, a credit card reader, or any other type of validation device.

Finally, the controller 34 drives a payout mechanism 40 which, for example, may be a coin hopper for feeding coins to the coin tray 26 to pay a prize once a predetermined combination of symbols carried on the reels 18 appears on the screen 16 or some other prize winning event occurs.

5 Referring now to Figures 3a to 3d of the drawings a first example of a feature game played on the gaming machine 10 is illustrated. A screen display of the feature game is designated generally by the reference numeral 50.

10 The feature game arises as a result of a trigger condition occurring in the base game. For example, the trigger condition may be the presence of three scatter symbols on the reels 18 of the base game 16.

When the trigger condition occurs, the feature game is displayed on the screen of the video display unit 14. The feature game 50 has a representation in the form of a thermometer 52 having gradations 54. The representation of the thermometer 52 has a bulb 56 and a column 58. The gradations 54 are marked on the column 58. A message 60 is also indicated on the screen display 50.

The processor 32 of the control circuit 30 determines a random level. In the example illustrated in Figures 3 and 4 the random level is set at 36. 20 The random level is set as a random number between one and the maximum gradation, for example, the gradation one hundred.

The player then starts the feature game and an indicator of "mercury" 62 (Figure 3b) rises in the column 58 of the thermometer 52. The player by means of an actuator (not shown) of the gaming machine 10 can, at any time, 25 decide to stop the rising column 62 of the thermometer 52.

In the example illustrated in Figure 3 of the drawings, the random number selected by the control circuit 30 is number 36. Thus, the indicator 62 continues rising in the column 58 until the random number 36 is reached. If the player has not pressed the actuator before the number 36 is reached as shown in Figure 3c to stop the indicator 62 rising in the column 58, the 30 feature ends. The win awarded at this point is zero and the normal game screen resumes. The lack of a prize may be indicated by an appropriate animation of the thermometer 52, for example, by the bulb 56 exploding as indicated at 64 in Figure 3d of the drawings.

Referring now to Figures 4a and 4b of the drawings, a further example is shown. With reference to Figures 3a to 3d of the drawings, like reference numerals refer to like parts, unless otherwise specified.

5 In this example, the random number is again selected at 36. However, in this case, when the indicator 62 reaches gradation or number 28, the player stops the indicator 62 rising in the column 58 of the thermometer 52. Accordingly, the player is awarded a prize of twenty eight credits and a win meter 68 of the gaming machine 10 is incremented. Also, the random
10 number as selected by the control circuit 30 of the gaming machine 10 is displayed, as indicated at 66 in Figure 4b of the drawings.

In Figures 5a to 5d, a further embodiment of a feature game is illustrated.

In this embodiment of the game, an initial screen display 70 shows an animation of a skydiver 72 about to jump from an aeroplane 74. The player
15 controls the point at which the skydiver 72 "pulls" the rip cord on the skydiver's parachute by pushing a button on the midtrim of the machine 10 or by using a touch screen sensor 36. If the rip cord is pulled in time for the parachute to open and save the skydiver from hitting the ground, the player wins a prize which is dependent upon how close to the ground the skydiver
20 72 got before the rip cord was pulled. However, if the parachute is opened too late to prevent the skydiver from hitting the ground, then only a consolation prize is given. Hence, in contrast to the embodiment described with reference to Figures 3 and 4 above, should the player fail to win a prize due to delaying too long, a consolation prize is still paid.

25 For example, a prize win may be in the range of one hundred to two hundred credits. However, for a failed jump the player may still be awarded a consolation prize of ten credits. When the feature game commences, an internal meter is initialised to one hundred credits. After the initial animation has commenced, the credit meter is incremented by a
30 predetermined amount. For example, the machine may have five different rates at which the internal meter may increment. The amount by which each single increment goes up will change depending on the rate selected. The rate is selected by the machine and the rates are defined as a first rate which increments by one credit, a second rate which increments by two credits, a
35 third rate which increments by four credits, a fourth rate which increments by five credits and a fifth rate which increments by ten credits. The machine

10 chooses a random number in the range one to five representing the chosen rate.

Further, in order to add a random factor into the feature game so that it is not entirely dependent upon players skill, the gaming machine 10 may still
 5 pick a random number that will be the maximum obtainable prize for that session as described with reference to the previous embodiment. Instead, the player may potentially be able to win a maximum amount from any session except that the rate of increment from the lower bound to the upper bound, as described above may vary depending on the rate selected by the machine
 10 10.

In the animation as shown in the drawings, once the skydiver 72 has ejected from the plane 70, as shown in Figure 5b of the drawings, the animation sequence is such that when the skydiver 72 is falling, as shown in Figure 5c of the drawings, the animation does not show the plane 74 or the
 15 ground so that the player is unable to judge how much time that player has to press the button. Also, different animations may apply for opening the parachute. For example, one may open straight away whilst, in another animation, the skydiver 72 may get caught in a crosswind and, as a result, take longer to open the parachute. It may even occur that the parachute fails
 20 to open even if the button has been pressed by the player. In so doing, random factors influence the player's skill making the feature less predictable.

In the example illustrated, it is assumed that the machine offers a prize between one hundred and two hundred credits. If, during the interval shown
 25 in Figure 5c, the meter reaches two hundred before the player has hit the button, then the player will have failed. The animation as shown in Figure 5d of the drawings will be displayed on the display screen 70 and the consolation prize of ten credits will be awarded.

If the player presses the button before the maximum credits have been
 30 reached, the internal meter will stop incrementing immediately. Another random number is selected in the range one to five to determine whether or not a success will be awarded. The options corresponding to the numbers one to five are the following:-

- Option 1: parachute opens safely and skydiver 72 sails safely to earth;
- 35 Option 2: skydiver 72 fails an initial attempt to open the parachute but eventually does and sails safely to earth;

Option 3: skydiver 72 cannot open the parachute but amid a fit of panic manages to open it only just before landing on the ground;

Option 4: commences the same as Option 3, but this time the skydiver hits the ground before the parachute opens with the parachute landing on top
5 of the skydiver 72; and

Option 5: commences the same as Option 4 except that the parachute never opens at all.

If the random number selected relates to Options 1, 2 or 3 then the appropriate animation will be played and the player will be paid the amount
10 that is on the internal meter. However, if Options 4 or 5 are chosen, then the appropriate animation will be played and only the consolation prize will be paid.

In yet a further embodiment of the invention, a current meter amount may be paid whether frozen by the player or not. Further, the amount on the
15 meter may vary in a non-uniform manner rather than incrementing at a fixed rate. The preferred embodiment for this feature game is a stock market game. It is envisaged that the player will be offered a variety of share options to choose from. The player will then be able to adjust the value of the prize by watching the fluctuating share prices and selling when the player is happy
20 with the value. A fixed period of time is given during which the player presses a button to sell that player's shares at any time. The value of the shares will vary within this time and animations will be used to support the fluctuations in the share values.

If the player presses the "sell" button within the fixed period of time
25 the player will be paid a prize which is the share price at the time that the button was pressed multiplied by the number of shares that the player has. If, however, the fixed time period expires before the player has pressed the button, the player will be paid the value of the shares at the time that the fixed period expired multiplied by the number of shares that the player has.

30 Thus, the stock market feature game may work as described below. A base game may have three different methods of triggering the feature. The method by which the feature is triggered will determine the number of shares given. For example, five scatter symbols may commence the feature with twenty shares, four scatter symbols with ten shares or three scatter symbols
35 with five shares. A second screen will be displayed showing information on the shares of three different companies. Each share will initially be valued at

the same price. The player will be able to choose the company that they want to buy shares in. The information for each company will include broker's tips and recent headlines that will serve to give the player advice about the volatility of each of the share options.

5 When the shares have been chosen, another screen is displayed showing a Stock Exchange floor. Signs will be positioned around the rims showing headlines relating to the shares that the player has purchased. A message will be displayed to the player requesting them to press one of two buttons, being a "Start Feature" or a "Sell" button. If the player presses the
10 "Sell" button then the player will be paid out the value of the shares as they were given to the player in the previous screen and the feature will terminate. If the player presses the "Start Feature" button, a meter will be displayed which reflects the current value of the shares. Another meter will display the total amount that the player has being the share value times the
15 number of shares. Headlines and signs around the Stock Exchange floor will begin to change the messages displayed and the two meters will change value by either going up or down depending on the messages displayed. As an indication, the company may be a museum and messages displayed may relate to a rare fossil being found by the museum which causes the share
20 price to go up. On the other hand, an earthquake may destroy a billion dollar excavation site leading to the share price going down. The direction of the share value movement and possibly the speed at which it moves will be randomly chosen and will change throughout the feature.

 If ten changes in share value occur without the player having pressed
25 the "Sell" button, then the day's end of trading will be reached and the player will be forced to sell the player's shares. Hence, the player will be paid the price of the shares when the thirty seconds terminated multiplied by the number of shares that the player has. In contrast, if the player presses the "Sell" button during the thirty second period, the player will be paid the
30 value of the shares multiplied by the number of the shares at the time that the "Sell" button was pressed and the feature will terminate.

Hence, it is an advantage of the invention that a game feature is provided which will enhance player excitement.

 It will be appreciated by persons skilled in the art that numerous
35 variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the

invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

Dated this 7th day of April 2000

Aristocrat Leisure Industries Pty Ltd
Patent Attorneys for the Applicant:
F B RICE & CO

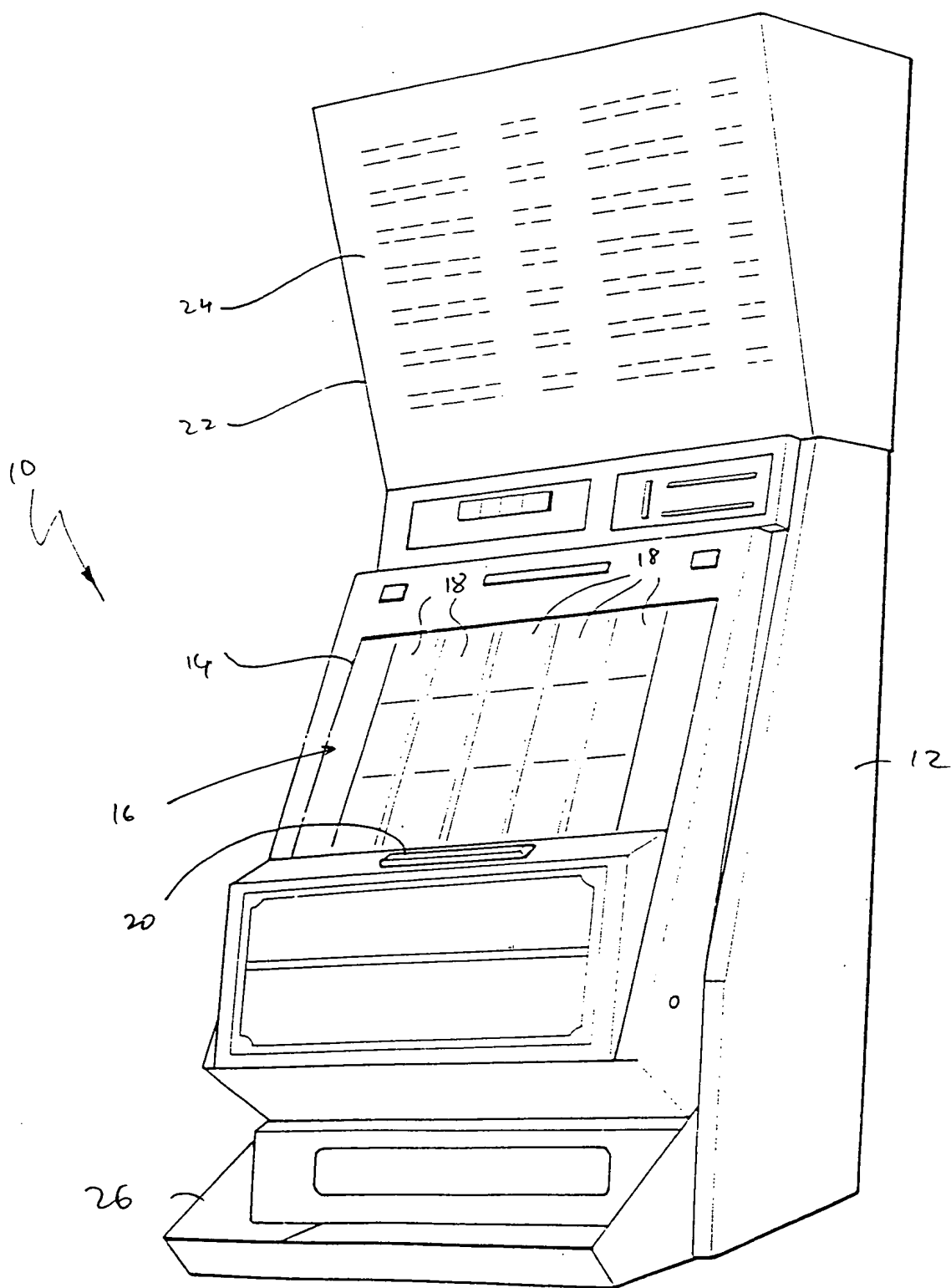


FIG. 1

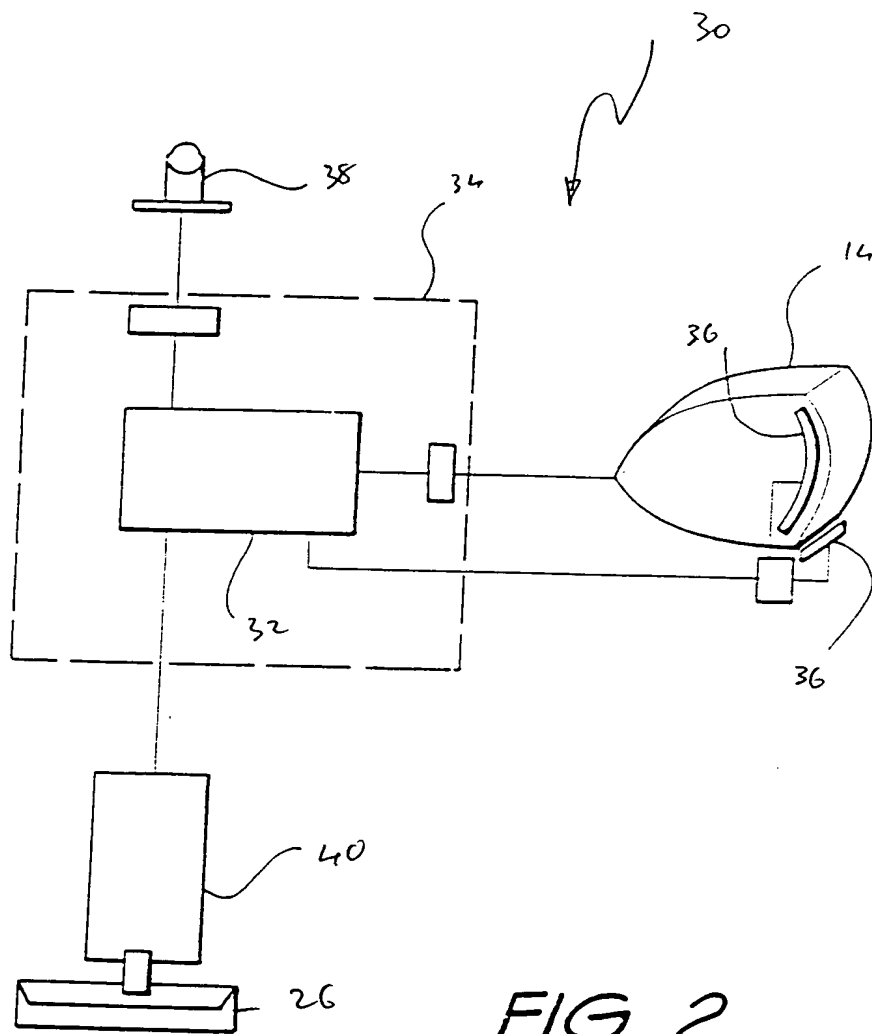


FIG. 2

CREDIT 50

WIN 0

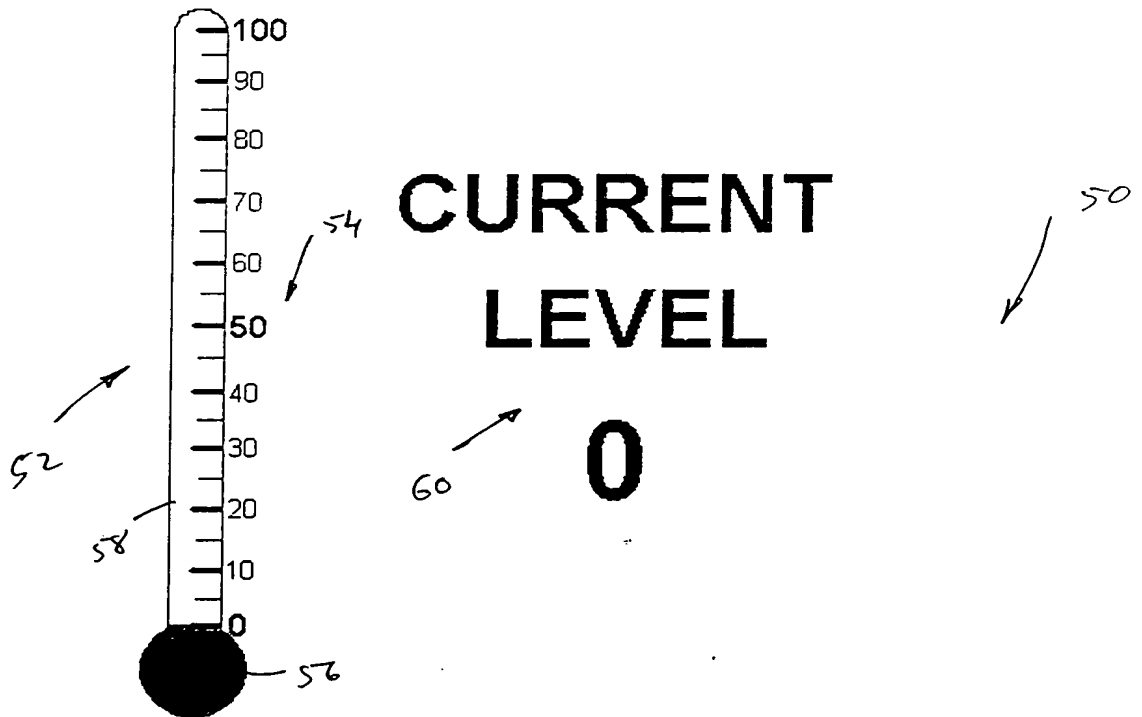


FIG. 3a

4/10

CREDIT 50

WIN 0

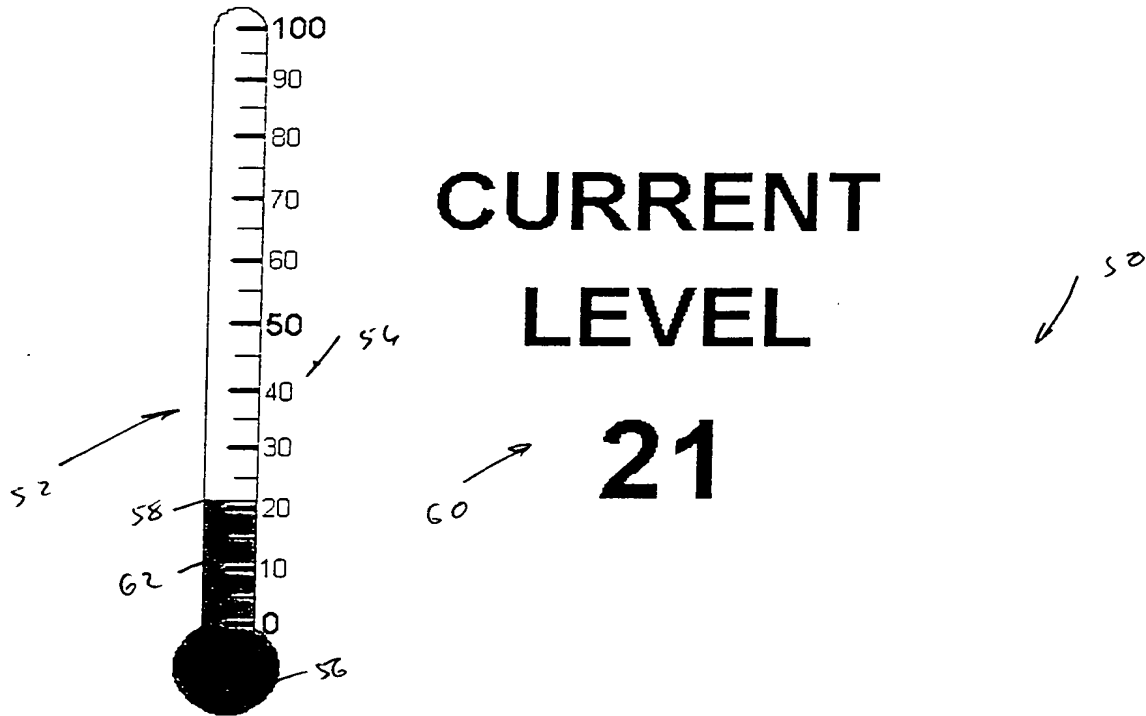


FIG. 3b

5/10

CREDIT 50

WIN 0

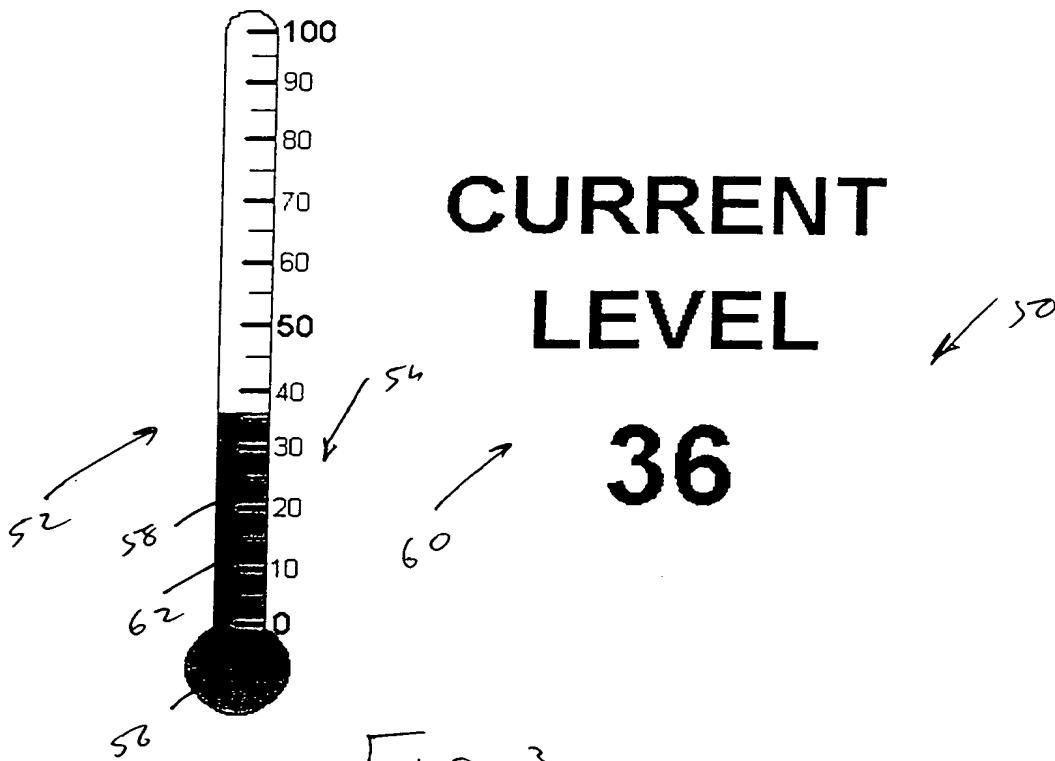


FIG. 3c

CREDIT 50

WIN 0

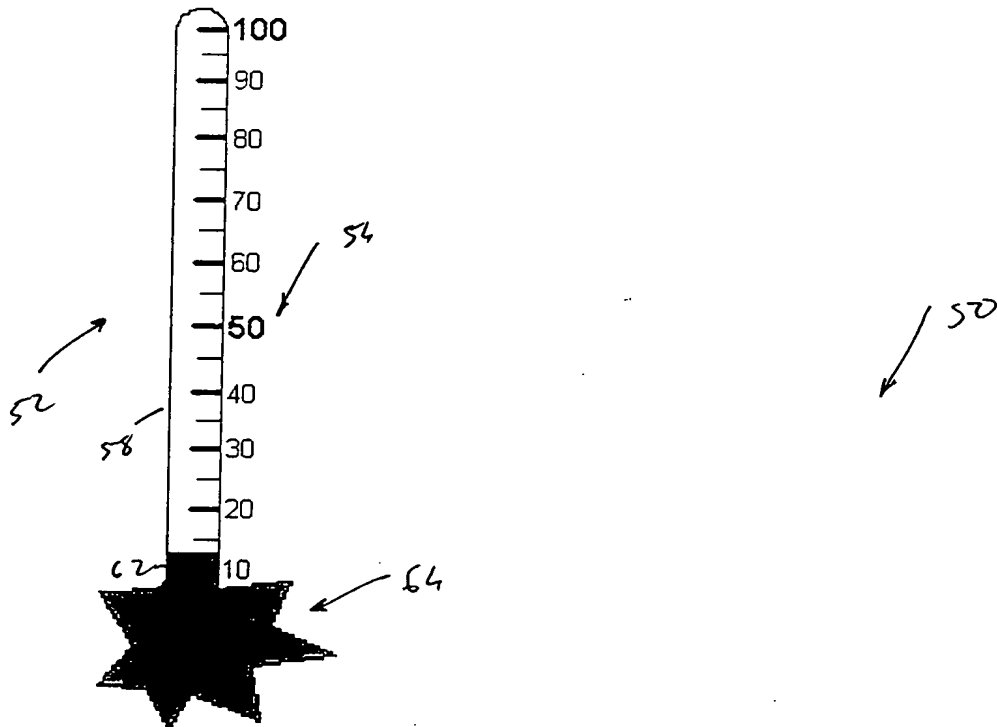


FIG. 3d

6/10

CREDIT 50

WIN 0

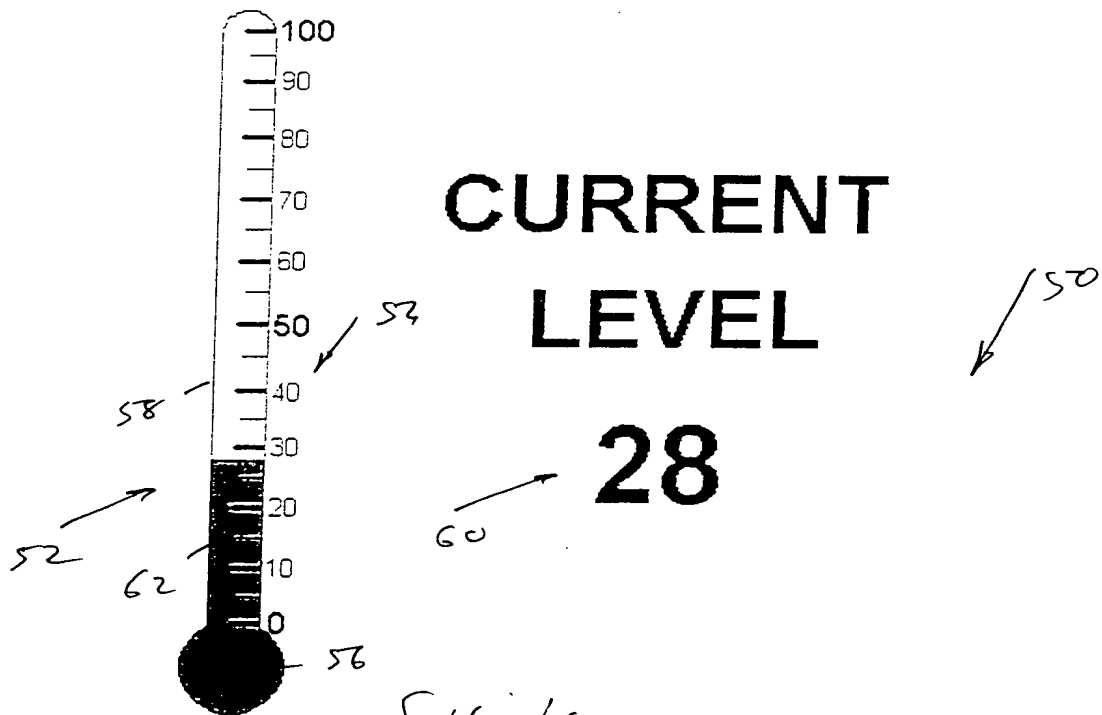


FIG 4a

CREDIT 50

WIN 28



FIG. 4b.

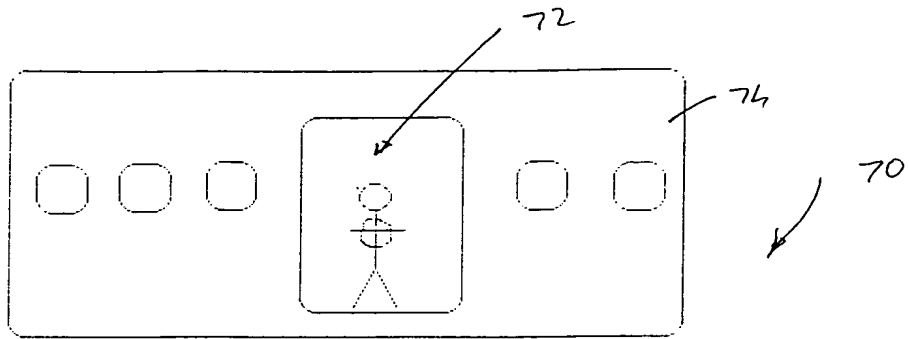


FIG. 5a

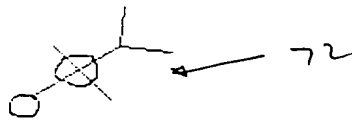
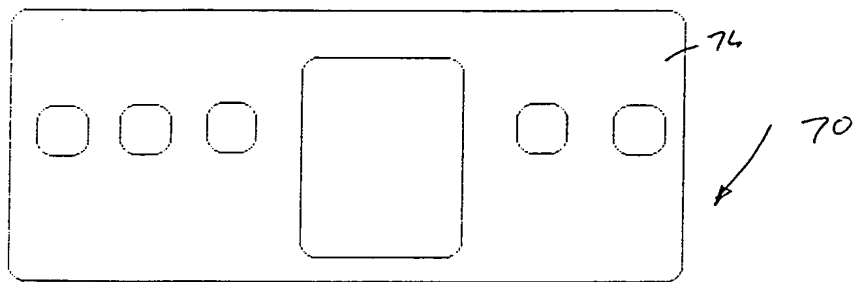


FIG. 5b

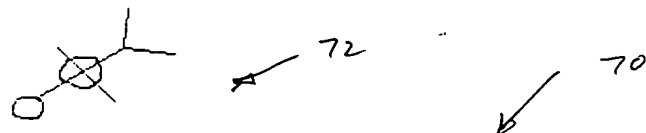


FIG. 5c

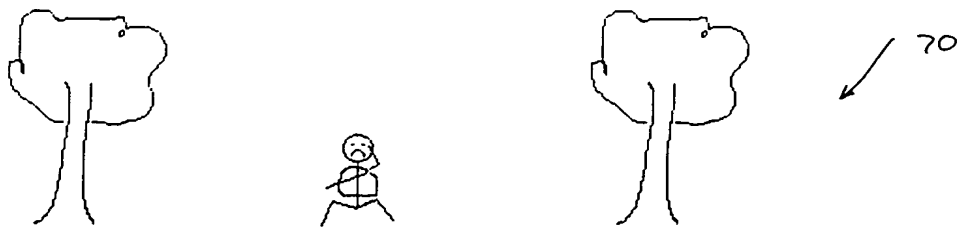
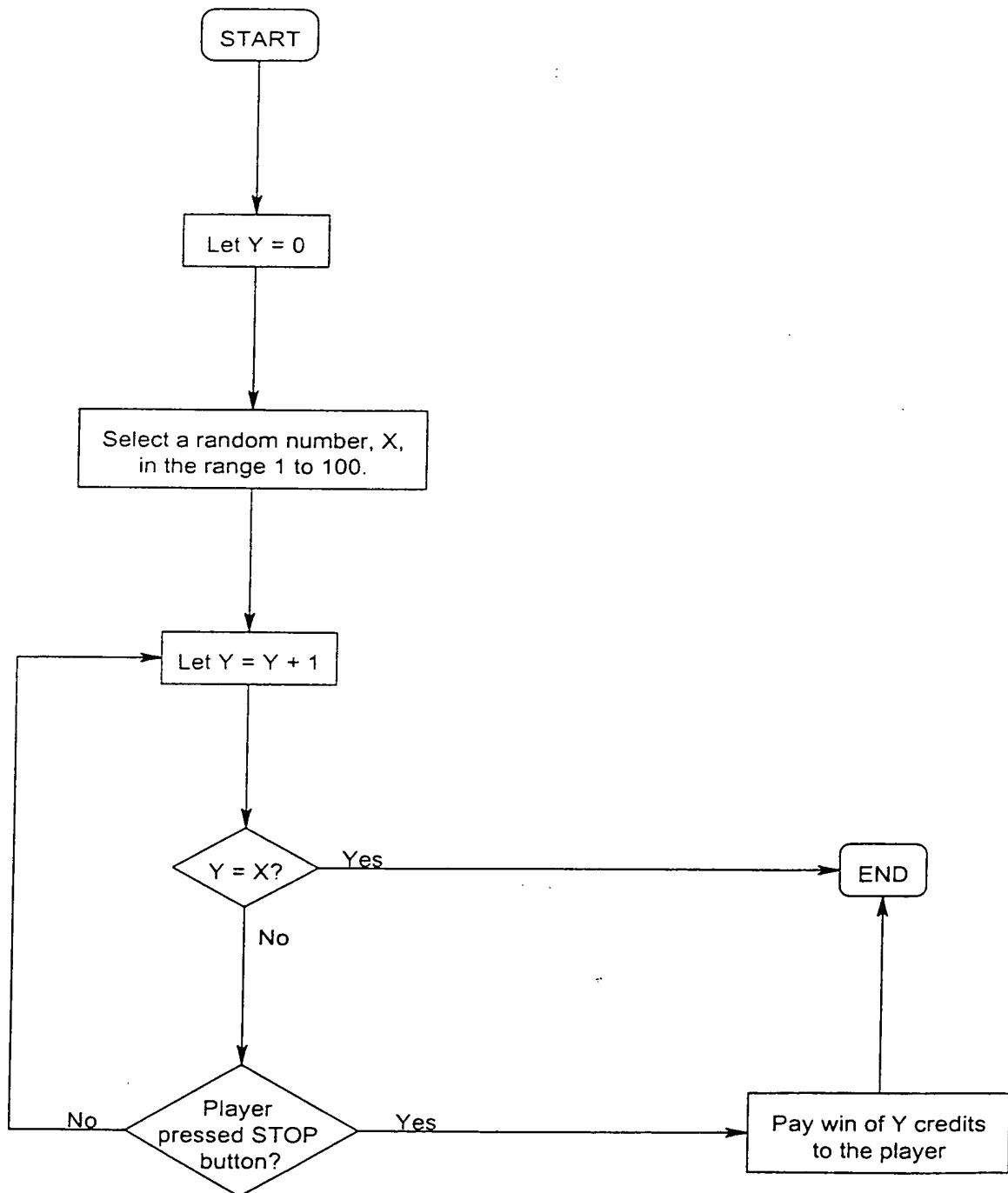


FIG. 5d

FIG 6

